



Australian Bureau of Statistics

1209.0.55.002 - Mesh Blocks Digital Boundaries, Australia, 2006

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Summary

Main Features

MESH BLOCKS DIGITAL BOUNDARIES, AUSTRALIA - PRODUCT BRIEF

PRODUCT DESCRIPTION

The ABS has developed Mesh Blocks as a new micro-level geographical unit for statistics. There are 314,369 spatial Mesh Blocks covering Australia with most residential Mesh Blocks containing approximately 30 to 60 dwellings. Mesh Blocks have been designed to be small enough to aggregate accurately to a wide range of spatial units and thus enable a ready comparison of statistics between geographical areas, and large enough to protect against accidental disclosure. Mesh Blocks are intended to become a new building block of statistical and administrative geography.

Experimental Mesh Blocks from the 2006 Census of Population and Housing are now available; the usual residence population and total dwellings are provided for each Mesh Block. The release of data for aggregations of Mesh Blocks is still under consideration by the Census Program, see www.abs.gov.au/census for more details on data availability.

This 2006 release of Mesh Blocks is experimental and boundaries will be reviewed and revised in preparation for the 2011 Census of Population and Housing.

The ABS is currently reviewing the Australian Standard Geographical Classification (ASGC) with the primary aim of simplifying and stabilising the classification. The proposed new Australian Statistical Geography will be built up from Mesh Blocks and be composed of a hierarchy of geographical units that will fulfil all the functionality of the present ASGC. For example, it is anticipated that the CD will be replaced by a similar sized unit expected to be called a Statistical Area Level 1 (SA1). Details of the review and a proposal to replace the ASGC can be found in the Information Paper **Review of the Australian Standard Geographical Classification** (ABS Cat. No. 1216.0.55.001).

OUTPUT FORMAT

Mesh Block Boundary files are supplied in the following formats:

- MapInfo mid/mif
- ESRI Shapefile

ATTRIBUTE INFORMATION

FILE ATTRIBUTES

File Type	Field Name MapInfo Files	Field Name Shapefiles	Type	Comments
Mesh Block (MB)	MB_Code	MB_Code	Float	11 digit Mesh Block code
	MB_Category	Category	Character	Landuse category
	Total_UR_Population_2006	TURPOP2006	Float	Total Usual Resident population
	Total_Dwellings_2006	TDWELL2006	Float	Total dwellings
	MB_Imputation_Rate	Imput_Rate	Character	Imputation rate quality indicator
	MB_Date_Modified	Date_Mod	Date	Records change date for the MB

MB_Code:An 11 digit field with the first digit being the state code.

The State/Territories are identified by unique one digit codes as follows:

- 1 = New South Wales
- 2 = Victoria
- 3 = Queensland
- 4 = South Australia
- 5 = Western Australia
- 6 = Tasmania
- 7 = Northern Territory
- 8 = Australian Capital Territory
- 9 = Other Territories

Note that there are special non spatial codes for each state (see "Non spatial Mesh Blocks" below)

MB_Category: The Mesh Block Category (MB_Category) attribute is a field based on planning/zoning scheme data provided by each state/territory. The ABS consolidated the files for each state/territory then mapped the land uses to a highly generalised set of land uses. The ABS acknowledges that this planning data represents a planned land use and there will be many cases where actual land use is quite different to the planned land use. The Mesh Block category shown in the Mesh Blocks boundary dataset is not designed to provide a definitive land use mapping, it is purely an indicator of the main planned land use for a Mesh Block.

Valid MB_Category values are; Residential, Commercial, Industrial, Agricultural, Parkland, Educational, Hospital/Medical, Transport, Water, Shipping, Nusualresidence and Other.

Total_UR_Population_2006: This is the count of people where they usually live, which may or may not be where they were on census night. This data is coded from the address supplied to the question "Where does the person usually live?". Please see the entry for Place of Usual Residence in **2901.0 - Census Dictionary, 2006** for more information.

Total_Dwellings_2006: A dwelling is a structure which is intended to have people live in it, and which is habitable on Census Night. Some examples of dwellings are houses, motels, flats, caravans, prisons, tents, humpies and houseboats. All occupied dwellings are counted in the Census. Unoccupied private dwellings are also counted with the exception of unoccupied dwellings in caravan parks, marinas and manufactured home estates. Please see the entry for Dwellings in **2901.0 - Census Dictionary, 2006** for more information.

MB_Imputation rates: Some Census data were not able to be attributed to a Mesh Block. The Mesh Block code for this uncoded data was therefore imputed using information on dwelling structure and the Collection District. The MB_Imputation_Rate field details the percentage of the dwellings attributed to each Mesh Block that were imputed. The ranges are;

MB_Imputation_rate Range

No Imputation 0

Low Imputation greater than 0% to less than 10%

Medium Imputation greater than 10% to less than 50%

High Imputation greater than 50% to less than 100%

The aim is to provide users with a broad indication of the quality of the coding associated with each Mesh Block.

MB_Date_Modified: This field is used to record when the most recent change was made to the Mesh Block. It can help relate the Mesh Block to the date of the topographic data used for its creation.

NON SPATIAL MESH BLOCKS

There are several Mesh Block codes that are not represented by a spatial object. These supplementary codes, or dump codes, are used when the dwelling and/or person cannot be coded to a location on the ground. For example if the Census form had No Address, No Fixed Address and No Usual address they could not be coded to a Mesh Block. These supplementary records have a MB_Category of 'Nusualresidence', and a MB_Code of;

NSW 100000009499

VIC 200000009499

QLD 300000009499

SA 400000009499

WA 500000009499

TAS 600000009499

NT 700000009499

ACT 800000009499

OT 900000009499

CENSUS QUALITY STATEMENT

The ABS aims to produce high quality data from the Census. To achieve this, extensive effort is put into Census form design, collection procedures, and processing procedures.

There are four principal sources of error in Census data: respondent error, processing error, partial response and undercount. Quality management of the Census program aims to reduce error as much as possible, and to provide a measure of the remaining error to data users, to allow them to use the data in an informed way. More detailed information on data quality is available in the 2006 Census Dictionary, in the section titled **Managing Census Quality**.

There are also errors introduced into the data to retain confidentiality of census respondents. Tables containing cells with very small counts may potentially result in an individual being identified. Consequently, all tables are subjected to confidentiality processes

before release. These steps are taken to avoid releasing information that may identify particular individuals, families, households or dwellings without impairing the usefulness of the data. The confidentiality technique applied by the ABS is to slightly adjust all cells to prevent any identifiable data being exposed. These adjustments result in small introduced random errors. Please see the Census factsheet on **Confidentiality of Census Data** for more information.

METADATA

Refer to the metadata file [1209.0.55.002 Geography Metadata Proforma](#).

REFERENCE

Information regarding the underlying concepts of Mesh Blocks may be found in the ABS publication **Information Paper: Mesh Blocks, 2003** (ABS Cat. No. 1209.0) and **Information Paper: Draft Mesh Blocks, Australia (Reissue), 2005** (ABS Cat. No. 1209.0.55.001). Mesh Blocks are going to be the basis for the new and revised ASGC, for information on the ASGC Review / ASG Classification please refer to the ABS publication **Review of the Australian Standard Geographical Classification, 2007** (ABS Cat. No. 1216.0.55.001).

For enquires please contact the ABS Geography Section, see details below.

ABS Geography Section

Email: geography@abs.gov.au

About this Release

Mesh Blocks are the smallest geographical unit for which ABS data will be output. Mesh Blocks will be integrated into the ABS' statistical geography for the 2011 Census.

The digital boundaries are supplied in MapInfo Interchange Format and ESRI Shapefile Format. Both are based upon the Geocentric Datum of Australia (GDA) 1994.

Explanatory Notes

Explanatory Notes

GEOGRAPHY METADATA PROFORMA

DATASET CUSTODIAN

Title

1 Mesh Blocks (2006) Digital Boundaries, Australia (ABS Cat. No. 1209.0.55.002)

Custodian

DESCRIPTION

Abstract

3 These digital boundaries represent Mesh Blocks which are the smallest geographical unit for which ABS data will be output. Mesh Blocks will be integrated into the ABS's statistical geography for the 2011 Census. These Mesh Blocks are currently experimental and contain basic 2006 Census data (total usual resident population and dwelling count). Mesh Blocks are identified with a unique 11 digit code.

Geographic Extent Name

4 Geographic Australia; including the external territories of Cocos (Keeling) Islands & Christmas Island but excluding all other external territories.

Data Currency

5 Beginning date: November 2004

End date: Contains updates in underlying topographic data up to August 2007.

Data Status

6 Progress: On-going

Maintenance and Update Frequency: On-going

DATA ACCESS

Stored Data Format

7 Digital MapInfo files

Available Format Type

8 MapInfo mid/mif and ESRI Shapefiles

Access Constraints

9 Copyright Commonwealth of Australia administered by the ABS.

DATA QUALITY

Lineage

10 Mesh Blocks boundaries were created using various sources including the PSMA digital topographic datasets and ABS SLA boundaries, zoning information from state planning agencies and imagery.

Positional Accuracy

11 The PSMA topographic database to which boundaries are aligned was captured at scales which vary from 1:4,000 in urban areas to 1:250,000 in remote areas.

Attribute Accuracy

12 Mesh Block codes & labels are fully validated.

Logical Consistency

13 Spatial units are closed polygons. These data include attribute records without spatial objects for administrative purposes.

Completeness

14 The 2006 Mesh Blocks are represented in their entirety.

CO-ORDINATE SYSTEMS

Datum

15 Geocentric Datum of Australia 1994 (GDA94)

Projection

16 Geographical (ie latitudes and longitudes)

Metadata Date

17 February 2008

Additional Metadata

18 Reference: Information Paper: Draft Mesh Blocks, Australia (Reissue), 2005 (ABS Cat. No. 1209.0.55.001)